DATA ITEM DESCRIPTION

Title: Contractor Quantity & Technical Data Reports (DD Forms 1921-Q, 1921-T)

Number:	DI-FNCL-XXXXX	**Approval Date**:	DRAFT
AMSC Number:	XXXX	**Limitation**:	
DTIC Applicable:	No	**GIDEP Applicable:**	No
Preparing Activity:	CAPE	**Project Number:**	FNCL-2015-001

1.0. **Applicable Forms:** Forms are available to be used to submit required formats as follows:

Technical Data Format	Form Number	Format Number
Quantity Data Report	DD Form 1921-Q	1
Technical Data Report	DD Form 1921-T	2

2.0. **Use/Relationship:** For background and detailed requirements related to Contractor Cost Data Reporting (CCDR), refer to DoD 5000.04-M-1, "Cost and Software Data Reporting (CSDR) Manual."

    2.1. The Cost and Software Data Reporting (CSDR) is the Department of Defense (DoD) system for collecting actual costs, software, and related business data. The resulting data repository serves as the primary source for contract cost and software data for most DoD resource analysis efforts; including cost database development, applied cost estimating, cost research, program reviews, Analysis of Alternatives (AoA), and life cycle cost estimates. All formats must be reported in response to Government solicitations according to Defense Federal Acquisition Regulations Supplement (DFARS) sections 234.7100, 234.7101, 242.503-2, 252.234-7003, and 252.234-7004:

        2.1.1. Format 1, DD Form 1921-Q, "Quantity Data Report," is used by contractors to submit: (1) units completed to date, and (2) units delivered at completion, by variant and subsystem, if applicable.

        2.1.2. Format 2, DD Form 1921-T, "Technical Data Report," is used by contractors to submit: (1) technical data parameter values, by variant and subsystem, if applicable, and (2) describe contextual information for each required technical data parameter.

    2.2. The Contractor Technical Data DID is structured around formats that contain the content and relationships required for the electronic submissions. This Data Item Description (DID) summarizes the Contractor Quantity Data Report (1921-Q) and Contractor Technical Data Report (1921-T) and provides instructions to complement the data requirements specified in the contract for CSDR reporting. The primary purpose of the data is as follows:

        2.2.1. DD Form 1921-Q data will be used by DoD Component staff, including program managers, systems engineers, cost estimators, logisticians and financial management personnel to: (1) review and evaluate in conjunction with cost data, and (2) develop learning curve and rate analysis for cost estimating purposes. It is important that the data be as accurate as possible so that they may be used for their intended purposes.

        2.2.2. DD Form 1921-T data will be used by DoD Component staff, including program managers, systems engineers, cost estimators, logisticians and financial management personnel to: (1) review and evaluate the program technical baseline; (2) describe the technical parameters required to develop a program life cycle cost estimate; and (3) collect technical and programmatic information in support of system trade off analysis and cost analysis activities. It is important that the data be as accurate as possible so that they may be used for their intended purposes.

    2.3. This DID summarizes the forms and provides instructions to support the data and frequency

requirements specified in the contract for CSDR technical reporting. DD Forms 1921-Q and 1921-T are related to other program acquisition requirements, including the "Contractor Cost and Hour FlexFile" (DI-FNCL-TBD), "SRDR Development/Maintenance" (DI-MGMT-82035), and the "Detailed Mass Properties Status Report", (DI-GDRQ-81231).

2.4. The 1921-Q and 1921-T requirements may be discussed with the Cost Working Group Integrated Product Team (CWIPT) at the Post-Award Conference, tailored through contract negotiations, and updated via a revised, approved contract or subcontract CSDR/EVM Co-Plan. Unless otherwise provided in the contract, data reported in the 1921-Q and 1921-T will pertain to all authorized contract work, including both priced and unpriced effort. Certain aspects of the report are subject to negotiation between the government and the contractor, such as the level of detail to be reported in the required formats.

2.5. Reporting is required throughout the complete life cycle to include the Operating and Support (O&S) phase of the program. Contract reporting is required throughout the life of the contract. Software sustainment activities are captured using the separate SRDR, Software Maintenance and Data Dictionary DID (DI-MGMT-82035).

3.0. Requirements:

3.1. Reference Documents. The applicable issue of the documents cited herein, including their approval dates and dates of any applicable amendments, notices, and revisions, will be as cited in ASSIST at the time of the solicitation; or, for non-ASSIST documents, as stated herein.

3.2. References.

3.2.1. DoD Instruction 5000.02, "Operation of the Defense Acquisition System," (current version), available at http://www.dtic.mil/whs/directives/. This instruction contains mandatory CCDR requirements.

3.2.2. DoDI 5000.73, "Cost Analysis Guidance and Procedures," (current version), available at http://www.dtic.mil/whs/directives/.

3.2.3. DoD 5000.04-M-1, "Cost and Software Data Reporting (CSDR) Manual," (current version), available at http://cade.osd.mil/csdr/CSDROverview.aspx#Manual.

3.2.4. "Operating and Support Cost-Estimating Guide", (current version), available at http://cade.osd.mil/csdr/CSDROverview.aspx#O&S.

3.2.5. MIL-STD-881C, "Work Breakdown Structure for Defense Materiel Items", (current version), available at https://assist.daps.dla.mil.

3.2.6. DD Form 2794, "Cost and Software Data Reporting Plan," (current version), available at http://cade.osd.mil. Commonly referred to as the CSDR Plan, a completed DD Form 2794 must be approved by the Office of the Secretary of Defense (OSD) Deputy Director, Cost Assessment (DDCA).

3.3. Format. Use DD Forms 1921-Q and 1921-T, and the detailed preparation instructions below. Data must be reported for each Work Breakdown Structure (WBS) Element for which an "X" is marked in Page 1, Item b (Technical Data – Technical Data) of the approved contract or subcontract CSDR/EVM Co-Plan. Omit the other WBS Elements.

All required DD Forms, 1921-Q and 1921-T, must be submitted in a human-readable Excel-compatible file and a Cost Assessment and Program Evaluation/Defense Cost and Resource Center (CAPE/DCARC)-approved Extensible Markup Language (XML) file to CADE's secure web-site using the CSDR Submit-Review System. The XML file can be generated automatically from the Excel-compatible file (or vice versa) with the DCARC's cPET software tool. Uploading reports requires the use of either a DoD Common Access Card (CAC) or a

DoD-approved External Certification Authority (ECA) certificate. See the CADE website for cPet and certification instructions (http://cade.osd.mil/).

3.4. Implementation. Contractors are responsible for implementing CCDR requirements on all subcontracts that meet the reporting thresholds (see DoD Instruction 5000.02, Table 4, "Regulatory Contract Reporting Requirements").

4.0. Preparation Instructions:

4.1. General Instructions. All reporting under this Technical Data DID will be in accordance with the DCARC/EVM Contract or Sub-contract Co-Plan (Form 2794) process; **hereafter referenced as the Co-Plan**.

4.1.1. All reporting must be based on the approved Co-Plan. The submission frequency and required formats will be defined in Page 5, Block 14 (Submission Events) of the approved contract or subcontract Co-Plan.

4.1.2. Mark the security classification of each report as "Unclassified" in the space provided on the upper left and lower right of the Form. However, if the report is classified, contact the DCARC for special processing instructions. Please note: "Proprietary" is not an official DoD security classification, and documents should not be marked as such. If the use of a proprietary disclosure statement is required, it should be inserted in the document's footer.

4.1.3. Three types of reports may be prepared under this DID: Initial Reports, Interim Reports, and Final Reports:

4.1.3.1. An Initial Report is a preliminary report used to verify the contractor's capability to prepare and submit the report in accordance with the DID and the approved contract or subcontract Co-Plan. Initial reports are required, and will be determined by the CWIPT and approved by DCARC.

4.1.3.2. An Interim Report is any report other than the Initial Report that is prepared before submission of the Final Report. The first Interim Report is required only after contract definitization. The as-of date for the first Interim Report is the last day of the 12th month following contract award, or the last day of the third month following contract definitization, whichever is later. The due date is 60 days following the as-of date. All other Interim Reports are determined by the CWIPT and approved in the Co-Plan.

4.1.3.3. Final Reports are intended to capture all or substantially all actual contract required data. A Final Report is required as of the last day of the month when two conditions have been satisfied: (1) the final end item has been delivered and accepted by the government (e.g., as evidenced by a completed DD 250) or higher tier contractor in the case of a subcontractor and (2) 95% or more of total contract costs have been incurred. The final due date is 60 days following the as-of date. In some cases, no cost contract extensions may be required to allow preparation and submission of the Final Report. In the case of a support or sustainment contract which has no deliverable end item, or a contract which is expected to incur significant cost after delivery of the last end item, the contract period of performance may be used in determining the timing of the final report.

4.1.4. Contractors must report all quantity and technical data associated with the contract, including Advance Procurement, Long Lead Materials, Multiyear Procurement, Inter-Division or Inter-Company Work Orders (IWOs), Foreign Military Sales (FMS), Warranty, etc. Quantity and Technical data should not be omitted based on contract CLIN structure or definition. If IWO costs exceed

$50M, separate reporting will be required for quantity and technical data.

5.0.   Specific Instructions:

5.1.   Common Metadata Information:

The following data elements must be reported:

5.1.1.   Item 1. Major Program Name: Enter the name given to the Major Defense Acquisition Program (MDAP) (ACAT IC or ID) or to the Major Automated Information Systems (MAIS) (ACAT IA) program as specified on the Defense Acquisition Management Information Retrieval (DAMIR) Program List (e.g., "BLACKHAWK UPGRADE (UH-60M) – Utility Helicopter Upgrade Program"). The name entered must be identical to the name on the DAMIR Program List.

5.1.2.   Item 2. Phase/Milestone: Enter one of the following for the appropriate Phase/Milestone which is being reported:

1.   Pre-A (Material Solution Analysis Phase),

2.   A (Technology Maturation and Risk Reduction Phase),

3.   B (Engineering and Manufacturing Development Phase),

4.   C-LRIP (Low-Rate Initial Production),

5.   C-FRP (Full-Rate Production), or

6.   O&S (Operations and Support Phase).

5.1.3.   Item 3. Prime Mission Product: Enter the most current official military designation for the end item as specified by the appropriate classification standard (e.g., DoD 4120.15-L, "Military Designation of Military Aerospace Vehicles," would specify "F-35" for the Joint Strike Fighter).

- For contract (or subcontract) Co-Plans, the end item being reported may have a different designation than the total program (e.g., the preparer would enter "AN/APG-81 Radar" for the F-35 Radar contract Co-Plan).

- If the end item does not have a military designation, enter the type of product being developed or procured, for example, radar.

5.1.4.   Item 4. Reporting Organization Type: Enter one of the following for the appropriate organization type:

1.   Prime/Associate Contractor,

2.   Direct-Reporting Subcontractor, or

3.   Government.

5.1.5.   Item 5. Performing Organization: Enter the following information for the organization actually performing the work:

5.1.5.1. Item 5a. Organization Name: Enter the name of the organization.

5.1.5.2. Item 5b. Division Name: Enter the name of the division of the organization performing the work, if applicable.

5.1.5.3. Item 5c. Cage Code: Enter the five-character ID number assigned to the organization performing the work, if applicable. If there are multiple Cage Codes, report all separated by commas.

5.1.5.4. Item 5d. Address: Enter the location of the organization, or the division of the

organization, if applicable. Include the following information:

- Street Address
- City
- State
- Zip Code

5.1.6.   Item 6. Approved Plan Number: Enter the Approved Plan Number of the current approved contract or subcontract Co-Plan that authorized the collection of data for this report.

5.1.7.   Item 7. Customer (Direct-Reporting Subcontractor Use Only):

- Enter the name of the prime contractor for whom the work on the subcontract is being performed.
- Otherwise enter NA (for "not applicable").

5.1.8.   Item 8. Contract Type:

- If the data are reported for a contract, enter the contract type code for the contract for which data are being reported.
- If the data are in response to a solicitation in accordance with DFARS sections 234.7101, 252.234-7003, and 252.234-7004 and the contract type has not been determined yet, enter NA (for "not applicable").

Contract/Order Type Code

FAR Contract Types	Contract Type Code
Cost Reimbursement Contracts	
Cost Sharing	CS
Cost Plus Award Fee	CPAF
Cost Plus Fixed Fee	CPFF
Cost Plus Incentive Fee	CPIF
Cost Plus Incentive Fee (With Performance Incentives)	CPIF(PI)
Fixed Price Contracts	
Firm Fixed Price	FFP
Fixed Price Incentive, Firm Target	FPIF
Fixed Price Incentive, Successive Targets	FPIST
Fixed Price Incentive, Successive Targets (With Performance Incentive)	FPIST(PI)
Fixed Price Incentive Firm Target (With Performance Incentive)	FPIFT(PI)
Fixed Price Award Fee	FPAF
Fixed Price with Economic Price Adjustment	FP/EPA
Fixed Price with Prospective Price Redetermination	FP/PPR
Fixed Ceiling Price with Retroactive Price Redetermination	FCP/RPR
Firm Fixed Price, Level of Effort Term	FFP/LOET
Indefinite Delivery Indefinite Quantity	IDIQ
Letter Contract and Undefinitized Contractual Action (UCA)	LC
Time and Materials	TM
Other Contracts	OC
Contracts with multiple Contract Types by Contract Line Item Numbers (CLINS)	MC

5.1.9.   Item 9. Contract Price: Enter the total contract price applicable to the data reported:

- If the data are in response to a solicitation in accordance with DFARS sections 234.7101, 252.234-7003, and 252.234-7004, enter the total estimated price.
- If the data being reported is for a lot, delivery order, or task, enter the price for the work being reported, not the total contract price.

5.1.10.   Item 10. Contract Number: Enter the assigned prime contract number the prime contractor has with the Government customer. This requirement is identical for both reporting contractors and reporting subcontractors.

5.1.11.   Item 11. Solicitation Number:

1. If the data are in response to a solicitation in accordance with DFARS sections 234.7101, 252.234-7003, and 252.234-7004, enter the solicitation number.

    2.   Otherwise enter NA (for "not applicable").

5.1.12. Item 12. Task Order/Delivery Order/Lot No.: If the data reported is for a task order, delivery order, or lot number for which the approved contract or subcontract Co-Plan has reporting requirements, enter the following information if applicable:

    5.1.12.1. Item 17a. Type: Enter the applicable number for one of the following:

        1. (1) Task Order,

        2. (2) Delivery Order,

        3. (3) Lot Number, or

        4. (4) Otherwise, NA (for "not applicable").

    5.1.12.2. Item 17b. Number: Enter the number of the Task Order/Delivery Order/Lot No.

5.1.13. Item 13. Period of Performance: Enter the dates for the data being reported (contract, lot, delivery order, or task). Enter the appropriate numeric data for the year, month, and day. For example, July 31, 2004, would be shown as 20040731.

    5.1.13.1. Item 13a. Start Date: The actual start date.

    5.1.13.2. Item 13b. End Date: The actual end date.

5.1.14. Item 14. Report Type: Enter one of the following:

    1. Initial,

    2. Interim, or

    3. Final.

5.1.15. Item 15. Submission Event: Enter the following information for the report submission:

    5.1.15.1. Item 15a. Number: Enter the submission number for the report provided.

    5.1.15.2. Item 15b. Name: Enter the submission event for the report provided. This must match Item 30c of the current approved contract or subcontract Co-Plan.

    5.1.15.3. Item 15c. Type: Enter one of the following:

        1. Initial,

        2. Change

5.1.16. Item 16. Report As Of: Enter the appropriate numeric data for the year, month, and last day of the reporting period. For example, July 31, 2004, would be shown as 20040731:

- For event driven submissions, the Report As Of date should be consistent with the event in Item 30c of the approved contract or subcontract Co-Plan.

- If an event date changes due to a programmatic schedule slip, adjustment to the "As of Date" reported in Item 30d of the Co-Plan must be requested through the CSDR Submit-Review system for DCARC approval by the Government Program Office prior to the date reflected in the Co-Plan. A date change request does not require an official Co-Plan revision.

5.1.17. Item 17. Point of Contact: Information for the person to contact for answers to any questions about entries on the submission:

    5.1.17.1. Item 17a. Name (Last Name, First name, and Middle Initial)

5.1.17.2.   <u>Item 17b. Department</u>

5.1.17.3.   <u>Item 17c. Telephone Number</u> (including Area Code)

5.1.17.4.   <u>Item 17d. E-mail Address</u>

5.1.18.   <u>Item 18. Date Prepared</u>: Enter the appropriate numeric data for the year, month, and day of the date the report was prepared in the appropriate numeric format. For example, July 31, 2004, would be shown as 20040731.

5.1.19.   <u>Item 19. Appropriation</u>: Enter one of the following to identify the type of appropriation used to fund the data reported:

1.   Research, Development, Test and Evaluation (RDT&E),

2.   Procurement,

3.   Operation and Maintenance (O&M),

4.   Foreign Military Sales (FMS),

5.   Working Capital Fund (WCF), or

6.   Other

5.1.20.   <u>Item 20. WBS System Type</u>: Enter the specific category of the defense materiel item contained in the appropriate Appendix to MIL-STD-881C (current version) that was used as the basis for the WBS (e.g., Aircraft Systems).

5.1.21.   <u>Item 21. Plan Type</u>: Enter one of the following for the plan type:

1.   Program Plan,

2.   Contract Plan (prime contract),

3.   Contract Plan (subcontract), or

4.   NA (for "not applicable").

5.1.22.   <u>Item 22. Remarks</u>: Note any relevant information that could be used in the interpretation of the data provided in this report. This item must not contain actual data.

5.2.   Format 1, "Contractor Quantity Data Report" (DD Form 1921-Q):

The 1921-Q report consists of three tables: Part I: Metadata, Part II: End Item Units, and Part III: Units Completed To Date and At Completion. Page 2 (Model/Variant/Flight End Items) of the approved contract or subcontract Co-Plan summarizes the government's requirements to breakout the quantity data by Unit or Lot, as well as designated Model breakouts. The expected delivered quantities on the contract are summarized here, and will serve as the basis for reporting Parts B (End Item Units) and C (Units Completed To Date and At Completion).

Enter the number of units completed To Date and At Completion by WBS element, as required by Page 1, Column 13b (Technical Data – Quantity) of the approved contract or subcontract Co-Plan.

5.2.1.   <u>Part I – Metadata:</u> The metadata for Items 1-22 should be reported according to the instructions in 5.1 Common Metadata Information of this Technical Data DID.

5.2.2.   <u>Part II – End Item Units:</u> The End Item Units table provides a summary for the collection of quantities for the end items as specified in the approved contract or subcontract Co-Plan. The number of end item units should be reported as defined in

Column 13b (Technical Data – Quantity Data), Page 1 (Summary) of the approved contract or subcontract Co-Plan. Additional partial systems or non-delivered items must also be reported, such as test units, spares, or any other internally developed hardware item.

The following data elements must be reported:

5.2.2.1. Column A. Model/Variant/Flight: The code which uniquely identifies a Model, Version, Lot, Flight, Variant or equivalent grouping or variant of a reported unit or system. Allowable entries for this element and their scope will be specified in Item 5 (Model IDs) on Page 2 (Model/Variant End Items) of the approved contract or subcontract Co-Plan. Additional sub-systems or non-delivered items must also be reported, such as test units, spares, or any other internally developed hardware item.

5.2.2.2. Column B. At Completion Units: The expected number of units associated with each hardware end item at the completion of the contract reported in Column A (Model/Variant/Flight), including all internally developed test units and spares, consistent with the expected number of end item units specified in Column 13b (Technical Data – Quantity Data), Page 1 (Summary) of the approved contract or subcontract Co-Plan. An end item is any fully completed unit, whether developed internally or delivered to the government.

5.2.2.3. Column C. Development/Production Unit: Either "Development" or "Production" to classify the type of unit being developed.

5.2.2.4. Column D. Comments: Any relevant information that could be used in the interpretation of the data provided in this report by WBS element.

5.2.3. Part III. Units Completed To Date and At Completion: The table represents total number of units developed To Date and At Completion. The sum of the units reported for the At Completion units should be equal to the number of units by Variant/Model/Flight reported in Part II (End Item Units), Column B (At Completion Quantity). The resulting total is representative of the total quantity per WBS element.

The following data elements must be reported:

5.2.3.1. Column A. WBS Element Code: The WBS Element Code for each WBS Element being reported. The code must be identical as presented in Page 1, Column 11 (WBS Element Code) of the approved contract or subcontract Co-Plan.

5.2.3.2. Column B. WBS Element Name: The WBS Element Name for each WBS Element being reported. The name must be identical as presented in the Page 1, Column 12 (WBS Element Name) of approved contract or subcontract Co-Plan.

5.2.3.3. Column C. Units Completed To Date: The total number of units completed on the contract to date (as of the "Report As Of" in 5.1.16). This value should not be calculated based on the contractor's EVMS system. Rather, the number of units to date should be an actual count of the completed units.

5.2.3.4. Column D. Units in Process: The total number of units started but not yet completed during the reporting period. This value should not be calculated based on the contractor's EVMS system. Rather, the number of units in

process should be a count (with partial units accounted) of the units started, yet incomplete, during the reporting period. A unit can be considered "started" with the opening of the first manufacturing work order.

5.2.3.5. <u>Column E1…n. Model/Variant/Flight ID:</u> The code which uniquely identifies a Model, Version, Lot, Flight, Variant, Block or equivalent grouping or variant of a reported unit or system. Allowable entries for this element and their scope will be specified in Item 5 (Model IDs) on Page 2 (Model/Variant End Items) of the approved contract or subcontract Co-Plan. Additional partial systems or non-delivered items must also be reported, such as test units, spares, or any other internally developed hardware item. For example, in a missile system the All Up Rounds, Test Vehicle, and Training Units (Captive Air) should be broken out separately. Each item must be reported in a single column, expanded to the right (E1…n).

5.2.3.6. <u>Column F. Internal Units:</u> The number of any units produced for internal use during contract performance to date (e.g., testing, spares). These units are not delivered to the government, and should be captured separately.

5.2.3.7. <u>Column G. Co-Production/Concurrent Units:</u> The number of concurrent units or lots, including military, commercial, and Foreign Military Sales (FMS).

5.2.3.8. <u>Column H. GFE Units:</u> The number of Government Furnished Equipment (GFE) units associated with each WBS element specified in Column A (WBS Element Code) and Column B (WBS Element Name), as required by the Co-Plan in Column 13.b.ii. (Quantity Reports Required, GFE). A GFE unit should be reported against any WBS element where cost is incurred by the reporting contractor for sub-assembly, integration, test, or checkout.

5.2.3.9. <u>Column I. Comments:</u> Any relevant information that could be used in the interpretation of the data provided in this report by WBS element.

5.3.   Format 2, "Contractor Technical Data Report" (DD Form 1921-T):

The 1921-T report consists of three tables: Part I: Metadata, Part II: Technical Parameter Data, and Part III: Technical Data WBS Mapping ID. Page 1 (Summary), Column 13b (Technical Data) of the approved contract or subcontract Co-Plan serves as a summary of the WBS elements that require technical parameter data. An individual WBS element may have multiple Item Type associations. Therefore, Page 3 (Item Type) of the approved Co-Plan will classify the general item type classification that is required by each WBS element required on Page 1 of the approved Co-Plan. Page 4, (Technical Data Requirements) of the approved Co-Plan will list the required parameter data by Item Type.

Part II (Technical Data) of the 1921-T report, is where the contractor technical data is reported by the Item Type, as required by the approved Co-Plan. In instances where a given Item Type entry may have multiple WBS element associations, or where there is more than one Model/Variant, the hardware items may be common or unique to the WBS element. The Mapping ID allows for a many-to-many reporting relationship between the Technical Parameter values and the WBS or Variant/Model/Flight, as specified by Page 2 (Model/Variant/Flight End Items) of the approved Co-Plan. Therefore, the table required by Part III (Mapping ID) allows the contractor to report the Mapping ID from Part II, and apply the different Item Types and parameters to the WBS and Model/Variant/Flight ID. The technical parameters for specific hardware or software components are required to be specified and collected once per submission, yet pertain to multiple occurrences throughout the WBS. This method of mapping the ID to the WBS element, and associating parameters with a WBS,

helps minimize redundancy and repetition of data submitted.

Similar to acquisition related contracts, a 1921-T report is required for sustainment contracts. The required 1921-T format for sustainment contracts is identical to that required for acquisition contracts except that the technical data parameters are unique to sustainment and relate to the sustainment Cost Reporting Structure (CRS) which is more activity-based vice product-based. The official listing of parameter names required in Column 2 (Technical Parameters) of Page 4 (Technical Parameter Requirements) of the approved contract or subcontract Co-Plan and definitions are provided on the CADE website, see http://cade.osd.mil.

Enter data for the items listed below, across the required tables:

5.3.1.   Part I – Metadata: The metadata for Items 1-22 should be reported according to the instructions in 5.1 Common Metadata Information of this Technical Data DID.

5.3.2.   Part II - Technical Parameter Data: Refer to Pages 3 (Item Type) and 4 (Technical Parameter Requirements) of the approved contract or subcontract Co-Plan for Item Type, Parameter Name, Unit of Measure, Unit of Measure Qualifier, and any CWIPT required remarks. Definitions are provided on the CADE website, see http://cade.osd.mil/cade/TechnicalData.aspx.

The following data elements must be reported:

5.3.2.1.   Column A. Mapping ID: By hardware item, a unique identifier by Item Type for each individual group of parameters. This is used to ma the technical parameters to the Model/Variant/Flight ID and corresponding WBS element code in the "Technical Data WBS Mapping ID" table. If there is only one identified Model/Variant/Flight ID, the reporting contractor may use the WBS element code as the Mapping ID.

5.3.2.2.   Column B. Item Type: The Item Type for each required WBS element, referencing Page 4 (Technical Parameter Requirements), Column 1 (Item Type) from the approved contract or subcontract Co-Plan. The Item Type is required for management of the Technical Parameter database and will always be defined for the reporting contractor as part of the Co-Plan.

5.3.2.3.   Column C. Technical Parameter Name: The Technical Parameter Name as presented in Column 2a (Parameter Name), Page 4 (Technical Parameter Requirements) of the approved contract or subcontract Co-Plan.

5.3.2.4.   Column D. Group Key: The Group Key indicator is used to keep like-rows together. This is necessary when a WBS element has repeated subsets of the same parameters. For example, if an electronic box has multiple cards that perform different functions, the technical parameters will need to be repeated for each unique card. The Group Key is used to ensure these parameters are grouped together in the CADE database. Any unique alpha-numeric content will meet the IT-need to keep records grouped, but even-so, reasonable meaningful keys are recommended. These keys exist solely in the context of a single submission.

5.3.2.5.   Column E. Value: A single value for the associated Technical Parameter associated with the unique Mapping ID in Column A (Mapping ID). The Type (numeric, text, multiple choice from list, etc.) of entry and the Unit of Measure (watts, percent, kilos, etc.) are defined by the parameter being requested. Parameters and their associated definition, allowable value, Unit of Measure, etc. will be specified in the approved Co-Plan language or by

other means. (Note: Each parameter definition has instructions for the Item Type entry and the additional data type information elements specified below).

5.3.2.6.   Column F. Margin: The percent margin for the associated Technical Parameter specified by the Mapping ID in Column A (Mapping ID). The margin should be reported for any hardware item with a reported technical parameter that is considered an "Estimated" value, as reported in Column I (Estimate/Actual).

5.3.2.7.   Column G. Unit of Measure: The Unit of Measure as presented in Column 2b (Unit of Measure), Page 4 (Technical Parameter Requirements) of the approved contract or subcontract Co-Plan. Requirements and guidance for the Unit of Measure entry are specific to each Parameter (or grouping of Parameters) and are provided with each Parameter definition.

5.3.2.8.   Column H. Unit of Measure Qualifier: The Unit of Measure Qualifier name as presented in Column 2c (Unit of Measure Qualifier), Page 4 (Technical Parameter Requirements) of the approved contract or subcontract Co-Plan. Requirements and guidance for the Unit of Measure Qualifier entry are specific to each Parameter (or grouping of Parameters) and are provided with each Parameter definition.

- For example, if the area of a Solar Array is required, the Unit of Measure might be square feet. The Unit of Measure Qualifier might be "Per Panel" if multiple array panels are specified or could be "Total" if the square footage is specified for the entire set of panel or entire array(s).

5.3.2.9.   Column I. Estimate/Actual: For each parameter value, the most representative valuation of the "pedigree" or derivation of the technical parameter values reported:

- Estimated – report if the parameter value applies to the following definitions:

  o Specified - It is likely that the reported value will deviate somewhat from the current prediction. A specified value might represent a most-likely estimate derived or taken from a specification expressed as a single value (Objective), or from an expressed pair (Objective and Threshold). It can also be an approximation based on historical experience, Subject Matter Expert (SME) experience, rough sketches, or conceptual analysis.

  o Designed - There is a realistic likelihood that the reported value specified will remain unchanged from the current prediction. Expected value from a design (e.g. pre-release or released drawings) expressed as a single value (e.g. Most Likely, or a Point Estimate with no statement of likelihood).

  o Exemplar - There is a good likelihood that the reported value will not deviate or only slightly vary from the current valuation. Expected value may come from (or be extrapolated from) an actual measurement of a developmental or production representative unit or from an un-verified specification or catalog.

- Actual – report if the parameter value applies to the following definition:

      o <u>Known</u> - The reported value will not deviate as it is a final measurement or valuation. Demonstrated (e.g. measured) value from completed production or operating unit, assembly, or other product being used or delivered and reported.

5.3.2.10. <u>Column J. Contracted Value</u>: Enter the threshold value as identified in the contract Statement of Work (SOW), for all hardware items identified with an X in Column 13.b.iii (Technical Data Reports Required, Contracted) of the approved contract or subcontract Co-Plan.

5.3.2.11. <u>Column K. Comments</u>: Enter any information that would explain any peculiarities or ambiguities in any of the data reported in Columns A-J. Reference Columns 2d…n (Comments), Page 4 (Technical Parameter Requirements) of the approved contract or subcontract Co-Plan, and enter any required information dictated by the CWIPT. Enter explanations of changes from previous submissions (e.g. error corrections or substantive changes in underlying equipment or products.) Include any basis for, or calculations, used to derive any of the element responses.

5.3.3. <u>Part III - Technical Data WBS Mapping ID</u>: The Technical Data WBS Mapping ID table references the WBS element codes and names from the approved contract or subcontract Co-Plan that are required in Column 1 (WBS Element Code) and Column 2 (WBS Element Names) on Page 3 (Technical Data Item Types). Additionally, if the contract deliverables include multiple variants, models, flights or subsystems, report the required models/variants/flights as required by Item 5 (Model IDs) on Page 2 (Model/Variant End Items) of the approved contract or subcontract Co-Plan.

The following data elements must be reported:

5.3.3.1. <u>Column A. WBS Element Code</u>: The WBS Element Code for each WBS element being reported. The code must be identical as presented in Column 1 (WBS Element Code), Page 3 (Item Type) of the approved contract or subcontract Co-Plan.

5.3.3.2. <u>Column B. WBS Element Name</u>: The WBS Element Name for each WBS element being reported. The name must be identical as presented in Column 2 (WBS Element Names), Page 3 (Item Type) of the approved contract or subcontract Co-Plan.

5.3.3.3. <u>Column C. Common</u>: The Mapping ID from Part II (Technical Parameter Data Table), Column A (Mapping ID) for Item Types that are common across all Models/Variants/Flights for the contract.

5.3.3.4. <u>Column D1…n. Model/Variant/Flight ID</u>: Mapping ID from Part II (Technical Parameter Data Table), Column A (Mapping ID) for Item Types which uniquely identify a Model, Version, Lot, Flight, Variant, Block or equivalent grouping or variant of a reported unit or system. Allowable entries for this element and their scope will be specified in Item 5 (Model IDs) on Page 2 (Model/Variant End Items) of the approved contract or subcontract Co-Plan. Additional partial systems or non-delivered items must also be reported, such as test units, spares, or any other internally developed hardware item. Each item must be reported in a single column, expanded to the right (D1…n).

- For example: A single contracted purchase of 100 aircraft may be

segregated into 5 lots of 20 aircraft each (with or without slight variations in their hardware/software content). In this case, the data reported (cost, technical, quantity, etc.) may require identification of the particular lot represented by the reported data (e.g. Model Id = Lot 1, Lot2 … or Lot 5). This entry allows multiple Mapping IDs from Part II (Technical Parameter Data Table), Column A (Mapping ID) per WBS Element Code (see Figure above).

END OF DI-FNCL-XXXXX